



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

*Handwritten signature*

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/023,341	12/17/2001	Charles Richard Elliott	K315.118.101	7999
25281	7590	01/29/2004		
DICKE, BILLIG & CZAJA, P.L.L.C. FIFTH STREET TOWERS 100 SOUTH FIFTH STREET, SUITE 2250 MINNEAPOLIS, MN 55402			EXAMINER SALATA, ANTHONY J	
			ART UNIT 2837	PAPER NUMBER

DATE MAILED: 01/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/023,341	Applicant(s) ELLIOTT, CHARLES RICHARD	
	Examiner Jonathan Salata	Art Unit 2837	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 November 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All   b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |



UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office  
ASSISTANT SECRETARY AND COMMISSIONER OF PATENTS AND  
TRADEMARKS  
Washington, D.C. 20231

Paper No: 01152004  
Serial Number: 10/023341  
Filing Date: December 17,2001

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

2. Claims 1,2, 4-10,13-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Erdman et al (5023527).

1,9,16,17) Erdman teaches in figures 1-27, a control circuit for a motor 1.

A Load dump transient circuit LDT (figure 25) is provided to detect a supply transient with capacitor 253 and connect a phase A,B,C to absorb the transient.

Program of figure 27 illustrates in steps 807,809

2) Step 809 is for duration of transient.

Art Unit: 2837

- 4) Switch 13, decoder 33.
- 5) Step 809 and capacitor 253 determine transient.
- 6,14) Col. 36 describes alternative embodiment wherein a network 775 allows for false over-currents with a time delay based on speed of the motor.
- 7,8,15) Step 809 circumvents the commutation step 803.
- 10) Voltage across capacitor 253, see col. 35 lines 40-44.
- 13) Divider 719 is part of detection and determines threshold value.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3,11,12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Erdman et al (5023527).

Erdman et al does not specifically state a SRM.

Erdman et al does state electrically commutated motor of which a SRM would fall under.

If the prior art structure is capable of performing the intended use, then it meets the claim.

In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

5. Applicant's arguments with respect to claims 1-17 are have been considered but are moot in view of the new ground(s) of rejection.

Art Unit: 2837

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Erdman '566 illustrate a similar motor protection system

A shortened statutory period for response to this action is set to expire 3 months from the date of this letter.

Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Any inquiry of a general nature or relating to the **status** of this application or **filing of papers** should be directed to the **Group receptionist whose telephone number is (703) 308-0956.**

Papers related to this application may be submitted to Group 2800 by facsimile transmission. Papers should be faxed to Group 2800 via the PTO 2800 Fax Center located at Crystal Plaza 4. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 O.G. 30 (November 15, 1989). The Group 2800 CP 4 Fax Center number is (703) 308-77(22 or 24).

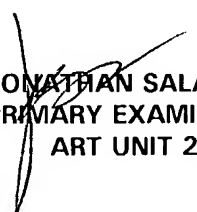
For assistance in **Patent procedure, fees or general Patent questions** calls should be directed to the **Patents Assistance Center (PAC)** whose telephone number is **800-786-9199**. Assistance is also available on the Internet at [www.uspto.gov](http://www.uspto.gov).

For requesting **copies** of Cited Art, Office Actions or the like, or General Problem solving, calls should be directed to the TC 2800 Customer Service Office whose telephone number is 703-306-3329 or by fax at 703-306-5515.

Any inquiry concerning **this communication or earlier communications from the examiner** should be directed to **Jonathan Salata** whose telephone number is **(703) 308-3120**. **After February 3, 2004 the new number will be (571) 272-2073**. The examiner can normally be reached on Monday through Thursday from 6:30 am to 2:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Nappi, can be reached on (703) 308-3370.

ajs  
January 16, 2004

  
**JONATHAN SALATA**  
**PRIMARY EXAMINER**  
**ART UNIT 2837**